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The barriers of knowledge generation, storage, distribution and application that impede learning in gas and petroleum companies

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Abstract:

Purpose – This paper aims to find and rank the barriers of the four knowledge management (KM) processes including generation, storage, distribution and application in the gas and petroleum sector. Design/methodology/approach – Reviewing the literature of KM and organizational learning, this paper extracted all of the barriers which impede KM processes. Then it designed a questionnaire for validating, ranking and categorizing barriers. Totally, 190 completed questionnaires were gathered from 26 gas and petroleum companies in Iran. Some statistical tests such as T, Friedman, Kruskal– Wallis and Mann– Whitney were used for analyzing data. Findings – Findings reviewed the current literature of KM barriers, validated and ranked the barriers of knowledge generation, storage, distribution and application separately. The importance of knowledge generation and knowledge application barriers were significantly different between gas and petroleum companies. Hence they were disjointedly ranked for gas and petroleum. Finally, KM barriers were ranked according to their contribution to KM processes and the average mean of their importance in KM processes. Practical implications – From the practical point of view, this paper suggests managers of gas and petroleum companies to emphasize solving high-priority barriers according to the KM process which they are focused on. Furthermore, the study provides a checklist that can be used as an assessment tool for evaluating KM processes considering barriers. Originality/value – This paper finds the importance of each barrier for each of the four KM processes and ranks the “critical barriers” according to their contribution to four KM processes in the gas and petroleum sector.

Keywords: Knowledge sharing, Knowledge management, Knowledge management processes, Organizational learning, Gas and petroleum, Knowledge management barriers.